

aqualab inc.
850 West Bartlett Rd.
Bartlett IL 60103
312-289-3100



12 July 1985

JUL 16 1985

Mr. Howard Chin
ILLINOIS ATTORNEY GENERAL OFFICE
160 No. LaSalle Street
Chicago IL 60691

EPA Region 5 Records Ctr.



327984

936847

Dear Mr. Chin:

Enclosed are the analytical results for the sample received by AQUALAB on 24 June 1985. Analyses included volatile and base/neutral extractable pollutants and acetone. The methods used for these analyses are found in the Federal Register, 43250, October 26, 1984.

Volatile organic analyses (VOA) were performed using EPA Method 624. Aliquots of the samples are placed in a sparging device. Internal standards and deuterium labelled surrogates are added to verify the analytical results and provide qualitative and quantitative references for every sample. The samples are then purged with helium and the volatile organics are transferred to the gas stream. The organics are removed from the gas stream with a Tenax/Silica Gel trap. When purging is complete, the trap is rapidly heated and the trapped organics transferred to the analytical chromatographic column of a gas chromatograph/mass spectrometer (GC MS). As the individual components elute, complete mass spectra are collected and stored by a computer system. The data are then processed by custom computer programs and also evaluated manually to detect and quantify priority pollutants. Identifications are verified by comparison of the sample component mass spectrum and retention time of that standard component.

Base/Neutral compounds were analyzed using EPA Method 625. Aliquots of the samples are extracted at a basic pH with methylene chloride. The extract was concentrated and analyzed by GC MS using the same approach as the volatile organics.

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Page Two

In addition to the priority pollutants found, the significant non-priority pollutants detected are reported on the enclosed report.

During the analysis of this project, the EPA Method and AQUALAB's internal Quality Control Program, consisting of the analysis of standards, blanks, performance standards, surrogate standards and Quality Control samples, were followed. These quality control functions indicated that the analyses were in control.

Also enclosed is a copy of the completed Chain of Custody record. If after reviewing these results you have any questions, please feel free to call. AQUALAB has been pleased to provide these analytical services for you. Also enclosed is the invoice and invoice voucher for all analytical work associated with this project.

Sincerely,

AQUALAB INC.

Robert N. Eschero
Division Manager

RNE/dab
Encls.

aqualab, inc.
850 West Bartlett Rd
Bartlett IL 60103
312-289-3100



ANALYTICAL REPORT

Mr. Howard Chin
OFFICE OF ILLINOIS ATTORNEY GENERAL
160 No. LaSalle Street
Chicago IL 60601

12 July 1985
Sample No. 83030

SAMPLE DESCRIPTION: Not responsive

Date Taken: 06-24-85

Date Received: 06-24-85

Acetone	<0.4	mg/L
Volatile fraction non-priority pollutant detected:		
methylcyclopentane	92.	ug/L
Base/Neutral fraction non-priority pollutant detected:		
9-oxoheptan-1-ol	36.	ug/L

The above non-priority pollutants are tentative identifications and the estimated concentrations are based on the response of the appropriate internal standard.

Robert N. Bucaro
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equalab inc.
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ANALYTICAL REPORT

Mr. Howard Chin
OFFICE OF ILLINOIS ATTORNEY GENERAL
160 No. LaSalle Street
Chicago IL 60601

12 July 1985
Sample No. 83030

SAMPLE RECEIVED: 06-24-85

SAMPLE DESCRIPTION: **Not responsive**

BASE/NEUTRAL COMPOUNDS

ug/L Compound

<10 Acenaphthene (1B)
<50 Benzidine (5B)
<10 1,2,4-Trichlorobenzene (8B)
<10 Hexachlorobenzene (9B)
<10 Hexachloroethane (12B)
<10 Bis(2-chloroethyl)Ether (18B)
<10 2-Chloronaphthalene (20B)
<10 1,2-Dichlorobenzene (25B)
<10 1,3-Dichlorobenzene (26B)
<10 1,4-Dichlorobenzene (27B)
<25 3,3'-Dichlorobenzidine (28B)
<10 2,4-Dinitrotoluene (35B)
<10 2,6-Dinitrotoluene (36B)
<10 1,2-Diphenylhydrazine (37B)
<10 Fluoranthene (39B)
<10 4-Chlorophenyl Phenyl Ether (40)
<10 4-Bromophenyl Phenyl Ether (41B)
<10 Bis(2-Chloroisopropyl)Ether (42)
<10 Bis(2-Chloroethoxy)Methane (43B)
<10 Hexachlorobutadiene (52B)
<25 Hexachlorocyclopentadiene (53B)
<10 Isophorone (54B)
<10 Naphthalene (58B)

ug/L Compound

<10 Nitrobenzene (56B)
<10 N-Nitrosodimethylamine (61B)
<10 N-Nitrosodiphenylamine (62B)
<10 N-Nitrosodi-n-propylamine (63B)
<10 Bis(2-Ethylhexyl)Phthalate (66B)
<10 Butyl Benzyl Phthalate (67B)
<10 Di-N-Butyl Phthalate (68B)
<10 Di-N-Octyl Phthalate (69B)
<10 Diethyl Phthalate (70B)
<10 Dimethyl Phthalate (71B)
<10 Benzo(a)Anthracene (72B)
<10 Benzo(a)Pyrene (73B)
<10 Benzo(b)Fluoranthene (74B)
<10 Benzo(k)Fluoranthene (75B)
<10 Chrysene (76B)
<10 Acenaphthylene (77B)
<10 Anthracene (78B)
<10 Benzo(ghi)Perylene (79B)
<10 Fluorene (80B)
<10 Phenanthrene (81B)
<10 Dibenzo(a,b)Anthracene (82B)
<10 Ideno(1,2,3-cd)Pyrene (83B)
<10 Pyrene (84B)

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ANALYTICAL REPORT

Mr. Howard Chin
OFFICE OF ILLINOIS ATTORNEY GENERAL
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Chicago IL 60601

12 July 1985
Sample No. 83030

SAMPLE RECEIVED: 06-24-85
SAMPLE DESCRIPTION: **Not responsive**

VOLATILE COMPOUNDS

ug/L Compound	ug/L Compound
<10 Acrolein (2V)	<1 1,2-Trans-Dichloroethylene (30V)
<10 Acrylonitrile (3V)	<1 1,2-Dichloropropane (32V)
117 Benzene (4V)	<1 1,3-Dichloropropylene (33V)
<1 Carbon Tetrachloride (6V)	<1 Ethylbenzene (38V)
<1 Chlorobenzene (7V)	<5 Methylene Chloride (44V)
39.0 1,2-Dichloroethane (10V)	<20 Methyl Chloride (45V)
<1 1,1,1-Trichloroethane (11V)	<20 Methyl Bromide (46V)
<1 1,1-Dichloroethane (13V)	<1 Bromoform (47V)
<1 1,1,2-Trichloroethane (14V)	<1 Dichlorobromomethane (48V)
<1 1,1,2,2-Tetrachloroethane (15V)	<1 Chlorodibromomethane (51V)
<20 Chloroethane (16V)	<1 Tetrachloroethylene (85V)
<1 2-Chloroethylvinyl Ether (19V)	1.3 Toluene (86V)
<1 Chloroform (23V)	<1 Trichloroethylene (87V)
<1 1,1-Dichloroethylene (23V)	<20 Vinyl Chloride (88V)

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